## CLAIMS

## What is claimed is:

1. A system for the diagnosis and/or for the parameterization of devices (1, 12, 19) forming sensors, actuators or controls and connected to a bus system, wherein device parameters can be read out of the device (1, 12, 19) and/or can be transmitted into the device (1, 12, 19) and device parameters read out and/or to be transmitted can be displayed visually by a display unit (4; 17, 4) using said system,

characterized in that the system includes a communication engine (7) for the communication, i.e. for the reading out and/or for the transmission of device parameters, of the system with the device (1, 12, 19) as well as a visualization engine (8) separate from the communication engine (7) for the visualization of the device parameters by the display unit (4; 17, 4), with the communication engine (7) and the visualization engine (8) being connected to one another via device-independent interfaces (9) for the exchange of data and the communication engine (7) being formed independently of the display unit (4; 17, 4) used.

2. A system in accordance with claim 1, characterized in that the system is integrated into a control unit (3) in particular formed as a personal computer and the display unit is formed by a display (4) of the control unit (3) directly connected to the control unit (3).

- 3. A system in accordance with claim 1, characterized in that the system is integrated into a control unit (3) in particular formed as a personal computer and the display unit is formed by a further computer (17) having a display (4) (display computer) which is connected to the control unit (3) via a network connection (15, 16).
- 4. A system in accordance with claim 4, characterized in that the system is integrated into the device (19) and the display unit is formed by a computer (17) having a display (4) (display computer) which is connected to the device (19) via a network connection (15, 16).
- 5. A system in accordance with claim 3, characterized in that the network connection (15, 16) is formed by a standardized network connection, in particular by an Ethernet connection or by a fieldbus (e.g. Profibus, DeviceNet, CAN-based fieldbus).
- 6. A system in accordance with claim 3, claim, characterized in that the visualization engine (8) includes a webserver (14).
- 7. A system in accordance with claim 3, characterized in that the visualization engine (8) includes a module, in particular an applet, which can be loaded into the display computer (17) via the network connection (15, 16) for the visualization of the device parameters and can be carried out in a client (18), in particular in an Internet browser, present on the display computer (17).

- 8. A system in accordance with claim 1, characterized in that interfaces (9) for core functionality and/or for the device object and/or for device parameters and/or for project management are provided between the communication engine (7) and the visualization engine (8).
- 9. A system in accordance with claim 1, characterized in that the communication engine (8) is made separately from the business logic (20) of the device (1, 12, 19).
- 10. A system in accordance with claim 4, characterized in that the communication engine (7) is integrated into the business logic (20) of the device (1, 12, 19).
- 11. A system in accordance with claim 1, characterized in that a substantially identical visualization takes place by the respectively used display unit (4; 17, 4) by the visualization engine (8) irrespective of the used display unit (4; 17, 4).